

Facility: <u>Beaver Valley Unit 2</u>		Date of Examination: <u>12/11 - 12/18/2015</u>
Developed by: Written: Facility <input checked="" type="checkbox"/> NRC <input type="checkbox"/> // Operating Facility <input checked="" type="checkbox"/> NRC <input type="checkbox"/>		
Target Date*	Task Description (Reference)	Chief Examiner's Initials
-180	1. Examination administration date confirmed (C.1.a; C.2.a and b)	<i>RD</i>
-150	2. NRC examiners and facility contact assigned (C.1.d; C.2.e)	<i>RD</i>
-150	3. Facility contact briefed on security and other requirements (C.2.c)	<i>RD</i>
-150	4. Corporate notification letter sent (C.2.d)	<i>RD</i>
[-120]	5. Reference material due (C.1.e; C.3.c; Attachment 3)	<i>RD</i>
{-90}	6. Integrated examination outline(s) due, including Forms ES-201-2, ES-201-3, ES-301-1, ES-301-2, ES-301-5, ES-D-1, ES-401-1/2, ES-401N-1/2, ES-401-3, ES-401N-3, ES-401-4, and ES-401N-4, as applicable (C.1.e and f; C.3.d)	<i>RD</i>
{-85}	7. Examination outline(s) reviewed by NRC and feedback provided to facility licensee (C.2.h; C.3.e)	<i>RD</i>
{-60}	8. Proposed examinations (including written, walk-through JPMs, and scenarios, as applicable), supporting documentation (including Forms ES-301-3, ES-301-4, ES-301-5, ES-301-6, and ES-401-6, ES-401N-6, and any Form ES-201-2, ES-201-3, ES-301-1, or ES-301-2 updates), and reference materials due (C.1.e, f, g and h; C.3.d)	<i>RD</i>
-45	9. Written exam and operating test reviews completed. (C.3.f)	<i>RD</i>
-30	10. Preliminary license applications (NRC Form 398's) due (C.1.i; C.2.g; ES-202)	<i>RD</i>
-21	11. Examination approved by NRC supervisor for facility licensee review (C.2.h; C.3.f)	<i>RD</i>
-21	12. Examinations reviewed with facility licensee (C.1.j; C.2.f and h; C.3.g)	<i>RD</i>
-14	13. Final license applications due and Form ES-201-4 prepared (C.1.i; C.2.i; ES-202)	<i>RD</i>
-14	14. Written examinations and operating tests approved by NRC supervisor (C.2.i; C.3.h)	<i>RD</i>
-7	15. Facility licensee management queried regarding the licensee's views on the examination. (C.2.j)	<i>RD</i>
-7	16. Final applications reviewed; 1 or 2 (if >10) applications audited to confirm qualifications / eligibility; and examination approval and waiver letters sent (C.2.i; Attachment 5; ES-202, C.2.e; ES-204)	<i>RD</i>
-7	17. Proctoring/written exam administration guidelines reviewed with facility licensee (C.3.k)	<i>RD</i>
-7	18. Approved scenarios, job performance measures, and questions distributed to NRC examiners (C.3.i)	<i>RD</i>
<p>* Target dates are generally based on facility-prepared examinations and are keyed to the examination date identified in the corporate notification letter. They are for planning purposes and may be adjusted on a case-by-case basis in coordination with the facility licensee.</p> <p>[Applies only] {Does not apply} to examinations prepared by the NRC.</p>		

Facility Beaver Valley Unit 2		Date of Examination: 12/7 thru 12/18 2015		
Item	Task Description	Initials		
		a	b*	c#
1. W R I T T E N	a. Verify that the outline(s) fit(s) the appropriate model per ES-401 or ES-401N.	ser	QWB	Ro
	b. Assess whether the outline was systematically and randomly prepared in accordance with Section D.1 of ES-401 or ES-401N and whether all K/A categories are appropriately sampled.	ser	QWB	Ro
	c. Assess whether the outline over-emphasizes any systems, evolutions, or generic topics.	ser	QWB	Ro
	d. Assess whether the justifications for deselected or rejected K/A statements are appropriate.	ser	QWB	Ro
2. S I M	a. Using Form ES-301-5, verify that the proposed scenario sets cover the required number of normal evolutions, instrument and component failures, technical specifications and major transients.	ser	QWB	Ro
	b. Assess whether there are enough scenario sets (and spares) to test the projected number and mix of applicants in accordance with the expected crew composition and rotation schedule without compromising exam integrity; and ensure that each applicant can be tested using at least one new or significantly modified scenario, that no scenarios are duplicated from the applicant's audit test(s), and scenarios will not be repeated on subsequent days.	ser	QWB	Ro
	c. To the extent possible, assess whether the outline(s) conform(s) with the qualitative and quantitative criteria specified on Form ES-301-4 and described in Appendix D.	ser	QWB	Ro
3. W / T	a. Verify that the systems walk-through outline meets the criteria specified on Form ES-301-2: (1) the outline(s) contain(s) the required number of control room and in-plant tasks distributed among the safety functions as specified on the form. (2) task repetition from the last two NRC examinations is within the limits specified on the form. (3) no tasks are duplicated from the applicant's audit test(s). (4) the number of new or modified tasks meets or exceeds the minimums specified on the form. (5) the number of alternate path, low-power, emergency, and RCA tasks meet the criteria on the form.	ser	QWB	Ro
	b. Verify that the administrative outline meets the criteria specified on Form ES-301-1: (1) the tasks are distributed among the topics as specified on the form. (2) at least one task is new or significantly modified. (3) no more than one task is repeated from the last two NRC licensing examinations.	ser	QWB	Ro
	c. Determine if there are enough different outlines to test the projected number and mix of applicants and ensure that no items are duplicated on subsequent days.	ser	QWB	Ro
	a. Assess whether plant-specific priorities (including PRA and IPE insights) are covered in the appropriate exam section.	ser	QWB	Ro
	b. Assess whether the 10 CFR 55.41/43 and 55.45 sampling is appropriate.	ser	QWB	Ro
	c. Ensure that K/A importance ratings (except for plant-specific priorities) are at least 2.5.	ser	QWB	Ro
4. G E N E R A L	d. Check for duplication and overlap among exam sections.	ser	QWB	Ro
	e. Check the entire exam for balance of coverage.	ser	QWB	Ro
	f. Assess whether the exam fits the appropriate job level (RO or SRO).	ser	QWB	Ro
		ser	QWB	Ro

Printed Name / Signature		Date
a. Author	T.A. Gaydosik / <i>T.A. Gaydosik</i>	8/27/15
b. Facility Reviewer (*)	D.W. Held / <i>D.W. Held</i>	8/28/15
c. NRC Chief Examiner (#)	P. Presby / <i>P. Presby</i>	11/30/15
d. NRC Supervisor	Donald E. Jackson, <i>Donald E. Jackson</i>	12/3/15

Note: # Independent NRC reviewer initial items in Column "c"; chief examiner concurrence required.
* Not applicable for NRC-prepared examination outlines

1. Pre-Examination**ORIGINAL**

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of **12/7/2015 through 12/18/2015 @ Beaver Valley Unit 2** as of the date of my signature. I agree that I will not knowingly divulge any information about these examinations to any persons who have not been authorized by the NRC chief examiner. I understand that I am not to instruct, evaluate, or provide performance feedback to those applicants scheduled to be administered these licensing examinations from this date until completion of examination administration, except as specifically noted below and authorized by the NRC (e.g., acting as a simulator booth operator or communicator is acceptable if the individual does not select the training content or provide direct or indirect feedback). Furthermore, I am aware of the physical security measures and requirements (as documented in the facility licensee's procedures) and understand that violation of the conditions of this agreement may result in cancellation of the examinations and/or an enforcement action against me or the facility licensee. I will immediately report to facility management or the NRC chief examiner any indications or suggestions that examination security may have been compromised.

2. Post-Examination

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the week(s) **12/7/2015 through 12/18/2015 @ Beaver Valley Unit 2** From the date that I entered into this security agreement until the completion of examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations, except as specifically noted below and authorized by the NRC.

PRINTED NAME	JOB TITLE / RESPONSIBILITY	SIGNATURE (1)	DATE	SIGNATURE (2)	DATE	NOTE
1. <u>THOMAS A. GAYOSSIK</u>	<u>FLEET EXAM TEAM LEAD</u>	<u>Thomas A. Gayossik</u>	<u>12/17/14</u>	<u>Thomas A. Gayossik</u>	<u>12/15/15</u>	
2. <u>Michael S. Klingsmith</u>	<u>Fleet Exam Team Dev.</u>	<u>Michael S. Klingsmith</u>	<u>12-17-14</u>	<u>Michael S. Klingsmith</u>	<u>12-15-15</u>	
3. <u>PAUL EISENMANN</u>	<u>FLEET EXAM TEAM DEVELOPER</u>	<u>Paul Eisenmann</u>	<u>12/17/14</u>	<u>Paul Eisenmann</u>	<u>12/15/15</u>	
4. <u>Russell C. Ertfield</u>	<u>simulator support</u>	<u>Russell C. Ertfield</u>	<u>6/16/15</u>	<u>Russell C. Ertfield</u>	<u>12/15/15</u>	
5. <u>Hugh E. Bruner</u>	<u>Hardware Support</u>	<u>Hugh E. Bruner</u>	<u>6-16-15</u>	<u>Hugh E. Bruner</u>	<u>12/15/15</u>	
6. <u>Rick Cavaliere</u>	<u>Software Support</u>	<u>Rick Cavaliere</u>	<u>6-16-15</u>	<u>Rick Cavaliere</u>	<u>12/15/15</u>	
7. <u>DAVE HELD</u>	<u>U2 SM / Facility Reviewer</u>	<u>Dave Held</u>	<u>8/4/15</u>	<u>Dave Held</u>	<u>12/15/15</u>	
8. <u>ERIC GLENZ</u>	<u>REACTOR OPERATOR</u>	<u>Eric Glenz</u>	<u>09/08/15</u>	<u>Eric Glenz</u>	<u>12/16/15</u>	
9. <u>Kim KRADEL</u>	<u>REACTOR OPERATOR</u>	<u>Kim Kradel</u>	<u>9-8-15</u>	<u>Kim Kradel</u>	<u>12-16-15</u>	
10. <u>ROBERT W. KUNDWORTH</u>	<u>U2 UNIT SUPERVISOR</u>	<u>Robert W. Kundworth</u>	<u>9-8-15</u>	<u>Robert W. Kundworth</u>	<u>12/16/15</u>	
11. <u>Justin E. Crocker</u>	<u>U2 Shift Manager</u>	<u>Justin E. Crocker</u>	<u>9/8/15</u>	<u>Justin E. Crocker</u>	<u>12/15/15</u>	
12. <u>Osandra M Washington</u>	<u>Software Support</u>	<u>Osandra M Washington</u>	<u>9/9/15</u>	<u>Osandra M Washington</u>	<u>12/15/15</u>	
13. <u>Richard Romisher</u>	<u>Unit 2 Unit Supervisor</u>	<u>Richard Romisher</u>	<u>9-19-15</u>	<u>Richard Romisher</u>	<u>12-15-15</u>	
14. <u>Jeffrey E. Freund</u>	<u>Reactor operator</u>	<u>Jeffrey E. Freund</u>	<u>9-21-15</u>	<u>Jeffrey E. Freund</u>	<u>12-15-15</u>	
15. <u>Terry A Pittas</u>	<u>Reactor operator</u>	<u>Terry A Pittas</u>	<u>9-21-15</u>	<u>Terry A Pittas</u>	<u>12-22-15</u>	

NOTES: **BV2LOT15 NRC Exam**

1. Pre-Examination**ORIGINAL**

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of **12/7/2015 through 12/18/2015 @ Beaver Valley Unit 2** as of the date of my signature. I agree that I will not knowingly divulge any information about these examinations to any persons who have not been authorized by the NRC chief examiner. I understand that I am not to instruct, evaluate, or provide performance feedback to those applicants scheduled to be administered these licensing examinations from this date until completion of examination administration, except as specifically noted below and authorized by the NRC (e.g., acting as a simulator booth operator or communicator is acceptable if the individual does not select the training content or provide direct or indirect feedback). Furthermore, I am aware of the physical security measures and requirements (as documented in the facility licensee's procedures) and understand that violation of the conditions of this agreement may result in cancellation of the examinations and/or an enforcement action against me or the facility licensee. I will immediately report to facility management or the NRC chief examiner any indications or suggestions that examination security may have been compromised.

2. Post-Examination

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the week(s) **12/7/2015 through 12/18/2015 @ Beaver Valley Unit 2** From the date that I entered into this security agreement until the completion of examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations, except as specifically noted below and authorized by the NRC.

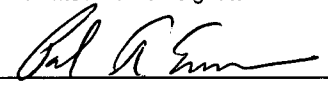
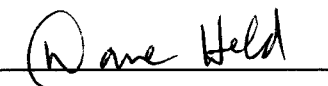
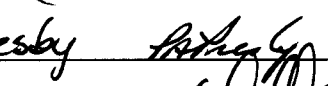
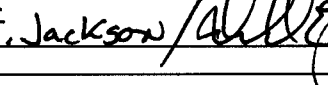
PRINTED NAME	JOB TITLE / RESPONSIBILITY	SIGNATURE (1)	DATE	SIGNATURE (2)	DATE	NOTE
1. James Lutz	Shift Manager	[Signature]	11-10-15	[Signature]	1-4-15	
2. Edward McFarland	Simulator Supt	[Signature]	11/24/15	[Signature]	12/15/15	
3. M.P. MERTENS	UNIT SUPERVISOR	[Signature]	12/3/15	[Signature]	12/15/15	
4. WALT SCOTT	UNIT SUPERVISOR	[Signature]	12/3/15	[Signature]	1/8/16 12/15/15	
5. RICHARD WORST	REACTOR OPERATOR	[Signature]	12-3-15	[Signature]	12-15-15	
6. JAMIE SMITH	REACTOR OPERATOR	[Signature]	12/3/15	[Signature]	12/16/15	
7. Greg Pelka	SUPV.	[Signature]	12/3/15	[Signature]	12/12/15	
8. Patrick J. Pitcher	Ops Instructor	[Signature]	12/2/15	[Signature]	12/15/15	
9. WAYNE HENRICK	OPS. INSTRUCTOR	[Signature]	12/4/15	[Signature]	12/15/15	
10. Michael AZURE	OPS Instructor	[Signature]	12/4/15	Johnnie for M. Azure	12/15/15	①
11. Paul Eagan	OPS Instructor	[Signature]	12/4/15	Johnnie for P. Eagan	12/15/15	
12. Dennis W. Catlett	OPS INSTRUCTOR	[Signature]	12-4-15	Johnnie for D. Catlett	12/15/15	①
13. GEORGE CHRISTOPHE	OPS INSTRUCTOR	[Signature]	12/4/15	[Signature]	12/15/15	
14. DAN ROSENBERG	OPS TRAINING SUPT	[Signature]	12/4/15	Johnnie for Dan D. Rosenberg	12/15/15	①
15. BLASE BARTO	SRO	[Signature]	12-8-15	[Signature]	12-16-15	

NOTES: **BV2LOT15 NRC Exam**

① Per telecon

Facility: **Beaver Valley Unit 2**Date of Examination: **12/7 Thru 12/18 2015**Operating Test Number: **BV2LOT15 NRC**

1. GENERAL CRITERIA		Initials		
		a	b*	c#
a.	The operating test conforms with the previously approved outline; changes are consistent with sampling requirements (e.g., 10 CFR 55.45, operational importance, safety function distribution).	PE	Qunt	B
b.	There is no day-to-day repetition between this and other operating tests to be administered during this examination.	PE	Qunt	B
c.	The operating test shall not duplicate items from the applicants' audit test(s) (see Section D.1.a).	PE	Qunt	B
d.	Overlap with the written examination and between different parts of the operating test is within acceptable limits.	PE	Qunt	B
e.	It appears that the operating test will differentiate between competent and less-than-competent applicants at the designated license level.	PE	Qunt	B
2. WALK-THROUGH CRITERIA				
a.	Each JPM includes the following, as applicable: <ul style="list-style-type: none"> initial conditions initiating cues references and tools, including associated procedures reasonable and validated time limits (average time allowed for completion) and specific designation if deemed to be time critical by the facility licensee specific performance criteria that include: <ul style="list-style-type: none"> detailed expected actions with exact criteria and nomenclature system response and other examiner cues statements describing important observations to be made by the applicant criteria for successful completion of the task identification of critical steps and their associated performance standards restrictions on the sequence of steps, if applicable 	PE	Qunt	B
b.	Ensure that any changes from the previously approved systems and administrative walk-through outlines (Forms ES-301-1 and 2) have not caused the test to deviate from any of the acceptance criteria (e.g., item distribution, bank use, repetition from the last 2 NRC examinations) specified on those forms and Form ES-201-2.	PE	Qunt	B
3. SIMULATOR CRITERIA				
a.	The associated simulator operating tests (scenario sets) have been reviewed in accordance with Form ES-301-4 and a copy is attached.	PE	Qunt	B

	Printed Name / Signature	Date
a. Author	<u>Paul Eisenmann</u> 	<u>10/5/15</u>
b. Facility Reviewer (*)	<u>Dave Held</u> 	<u>10/6/15</u>
c. NRC Chief Examiner (#)	<u>Peter Presby</u> 	<u>11/6/15</u>
d. NRC Supervisor	<u>Donald E. Jackson</u> 	<u>11/27/15</u>

NOTE: * The facility signature is not applicable for NRC-developed tests.
Independent NRC reviewer initial items in Column "c"; chief examiner concurrence required.

Facility: BVPS-2		Date of Exam: 12/7 THRU 12/18 2015		Scenario Numbers		Operating Test No.: BV2LOT15 NRC		
QUALITATIVE ATTRIBUTES						Initials		
						a	b*	
						c#		
1.	The initial conditions are realistic, in that some equipment and/or instrumentation may be out of service, but it does not cue the operators into expected events.					set	QNH	
2.	The scenarios consist mostly of related events.					set	QNH	
3.	Each event description consists of <ul style="list-style-type: none"> the point in the scenario when it is to be initiated the malfunction(s) or conditions that are entered to initiate the event the symptoms/cues that will be visible to the crew the expected operator actions (by shift position) the event termination point (if applicable) 					set	QNH	
4.	The events are valid with regard to physics and thermodynamics.					set	QNH	
5.	Sequencing and timing of events is reasonable, and allows the examination team to obtain complete evaluation results commensurate with the scenario objectives.					set	QNH	
6.	If time compression techniques are used, the scenario summary clearly so indicates. Operators have sufficient time to carry out expected activities without undue time constraints. Cues are given.					set	QNH	
7.	The simulator modeling is not altered.					set	QNH	
8.	The scenarios have been validated. Pursuant to 10 CFR 55.46(d), any open simulator performance deficiencies or deviations from the referenced plant have been evaluated to ensure that functional fidelity is maintained while running the planned scenarios.					set	QNH	
9.	Every operator will be evaluated using at least one new or significantly modified scenario. All other scenarios have been altered in accordance with Section D.5 of ES-301.					set	QNH	
10.	All individual operator competencies can be evaluated, as verified using Form ES-301-6 (submit the form along with the simulator scenarios).					set	QNH	
11.	The scenario set provides the opportunity for each applicant to be evaluated in each of the applicable rating factors. (Competency Rating factors as described on forms ES-303-1 and ES-303-3.					set	QNH	
12.	Each applicant will be significantly involved in the minimum number of transients and events specified on Form ES-301-5 (submit the form with the simulator scenarios).					set	QNH	
13.	The level of difficulty is appropriate to support licensing decisions for each crew position.					set	QNH	
TARGET QUANTITATIVE ATTRIBUTES (PER SCENARIO; SEE SECTION D.5.d)					Actual Attributes			
					#1	#2	#3	#4
1.	Malfunctions after EOP entry (1-2)				3	3	3	3
2.	Abnormal events (2-4)				3	2	3	2
3.	Major transients (1-2)				2	1	2	2
4.	EOPs entered/requiring substantive actions (1-2)				3	3	2	3
5.	EOP contingencies requiring substantive actions (0-2)				1	1	0	0
6.	EOP based Critical tasks (2-3)				3	3	3	4
NOTE: * The facility signature is not applicable for NRC-developed tests. # Independent NRC reviewer initial items in Column "c"; chief examiner concurrence required.								

Facility Beaver Valley 2		Date of Exam 12/7 thru 12/18 2015		Operating Test No BV2LOT15 NRC														
A P P L I C A N T	E V E N T T Y P E	Scenarios												T O T A L	M I N I M U M (-)			
		1			2			3 BACKUP			4							
		CREW POSITION			CREW POSITION			CREW POSITION			CREW POSITION							
		S R O	A T C	B O P	S R O	A T C	B O P	S R O	A T C	B O P	S R O	A T C	B O P					
															R	I	U	
M A S T E R	RX		4			1						2				1	1	0
	NOR	4		4	1		1	3		3	1,2,5	5	1			1	1	1
	I/C	1,2,3 6,7,9	1,3,7, 9	2,6	2,3,6, 7,8	3,6	2,7,8	1,2,4, 6,7,9	1,2,4	6,7,9	3,4,9, 10,11	4,9, 11	3,10			4	4	2
	MAJ	5,8	5,8	5,8	5	5	5	5,8	5,8	5,8	7,8	7,8	7,8			2	2	1
	TS	1,2,3			3,4			1,3			4,6					0	2	2
SROI-1 <input checked="" type="checkbox"/>	RX		4												1	1	1	0
	NOR				1						1,2,5				4	1	1	1
	I/C		1,3,7, 9		2,3,6, 7,8						3,4,9, 10,11				14	4	4	2
	MAJ		5,8		5						7,8				5	2	2	1
	TS				3,4						4,6				4	0	2	2
SROI-2 <input checked="" type="checkbox"/>	RX											2			1	1	1	0
	NOR	4			1							5			3	1	1	1
	I/C	1,2,3 6,7,9			2,3,6, 7,8							4,9, 11			14	4	4	2
	MAJ	5,8			5						7,8				5	2	2	1
	TS	1,2,3			3,4										5	0	2	2
SROI-3 <input checked="" type="checkbox"/>	RX					1									1	1	1	0
	NOR	4									1,2,5				4	1	1	1
	I/C	1,2,3 6,7,9				3,6					3,4,9, 10,11				13	4	4	2
	MAJ	5,8				5					7,8				5	2	2	1
	TS	1,2,3									4,6				5	0	2	2

1.

Facility Beaver Valley 2		Date of Exam 12/7 thru 12/18 2015		Operating Test No BV2LOT15 NRC														
A P P L I C A N T	E V E N T T Y P E	Scenarios												T O T A L	M I N I M U M (-)			
		1			2			3 Back-up			4							
		CREW POSITION			CREW POSITION			CREW POSITION			CREW POSITION							
		S R O	A T C	B O P	S R O	A T C	B O P	S R O	A T C	B O P	S R O	A T C	B O P					
														R I U				
RO-1 <input checked="" type="checkbox"/>	RX					1								1	1	1	0	
	NOR			4										1	1	1	1	
	I/C			2,6		3,6								4	4	4	2	
	MAJ			5,8		5								3	2	2	1	
	TS													0	0	2	2	
RO-2 <input checked="" type="checkbox"/>	RX										2			1	1	1	0	
	NOR			4			1				5			3	1	1	1	
	I/C			2,6			2,7,8				4,9, 11			8	4	4	2	
	MAJ			5,8			5				7,8			5	2	2	1	
	TS													0	0	2	2	
RO-3 <input checked="" type="checkbox"/>	RX					1								1	1	1	0	
	NOR			4								1		2	1	1	1	
	I/C			2,6		3,6						3,10		6	4	4	2	
	MAJ			5,8		5						7,8		5	2	2	1	
	TS													0	0	2	2	
RO-4 <input checked="" type="checkbox"/>	RX		4											1	1	1	0	
	NOR						1							1	1	1	1	
	I/C		1,3,7, 9				2,7,8							7	4	4	2	
	MAJ		5,8				5							3	2	2	1	
	TS													0	0	2	2	
RO-5 <input checked="" type="checkbox"/>	RX		4											1	1	1	0	
	NOR						1					1		2	1	1	1	
	I/C		1,3,7, 9				2,7,8					3,10		9	4	4	2	
	MAJ		5,8				5					7,8		5	2	2	1	
	TS													0	0	2	2	

1.

Instructions:

1. Check the applicant level and enter the operating test number and Form ES-D-1 event numbers for each event type; TS are not applicable for RO applicants. ROs must serve in both the "at-the-controls" (ATC) and "balance-of-plant" (BOP) positions; Instant SROs (SRO-I) must serve in both the SRO and the ATC positions, including at least two instrument or component (I/C) malfunctions and one major transient, in the ATC position. If an SRO-I *additionally* serves in the BOP position, one I/C malfunction can be credited toward the two I/C malfunctions required for the ATC position.
2. Reactivity manipulations may be conducted under normal or *controlled* abnormal conditions (refer to Section D.5.d) but must be significant per section C.2.a of Appendix D. (-) Reactivity and normal evolutions may be replaced with additional instrument or component malfunctions on a one-for-one basis.
3. Whenever practical, both instrument and component malfunctions should be included; only those that require verifiable actions that provide insight to the applicant's competence count toward the minimum requirements specified for the applicant's license level in the right-hand columns.
4. For licensees that use the ATC operator primarily for monitoring plant parameters, the chief examiner may place SRO-I applicants in either the ATC or BOP position to best evaluate the SRO-I in manipulating plant controls.

Facility: Beaver Valley Unit 2		Date of Examination: 12/7 thru 12/18 2015				Operating Test No.: BV2LOT15 NRC							
Competencies	APPLICANTS												
	ATC <input checked="" type="checkbox"/>				BOP <input checked="" type="checkbox"/>				SRO-I <input checked="" type="checkbox"/>				
	SCENARIO				SCENARIO				SCENARIO				
	1	2	3	4	1	2	3	4	1	2	3	4	
Interpret/Diagnosis Events and Conditions	1,3,5 7,8,9	1,3,4 5,6	1,2,4 5,8	1,4,5 6,7,8 9,11	2,5,6 8	1,2,5 7,8	5,6,7 8,9	3,7,8 10	1,2,3 5,6,7 8,9	1,2,3, 4,5,6, 7,8,	1,2,4, 5,6,7, 8,9	3,4,6, 7,8,9 10,11	
Comply With and Use Procedures (1)	1,3,4 5,7,8 9	1,3,4 5,6	1,2,4 5,8	1,4,5 6,7,8 9,11	2,4,5 6,8	1,2,5 7,8	3,5,6 7,8,9	2,3,7 8,10	1,2,3 4,5,6 7,8,9	1,2,3, 4,5,6, 7,8,	1,2,3, 4,5,6, 7,8,9	1,2,3 4,5,6 7,8,9 10,11	
Operate Control Boards (2)	1,3,5, 7,8,9	1,3,5 6	1,2,4 5,8	1,4,5 6,7,8 9,11	2,4,5 6,8	1,2,5 7,8	3,5,6 7,8,9	2,3,7 8,10					
Communicate and Interact	1,3,4 5,7,8 9	1,3,4 5,6	1,2,4 5,8	1,4,5 6,7,8 9,11	2,4,5 6,8	1,2,5 7,8	3,5,6 7,8,9	2,3,7 8,10	1,2,3 4,5,6 7,8,9	1,2,3, 4,5,6, 7,8,	1,2,3, 4,5,6, 7,8,9	1,2,3 4,5,6 7,8,9 10,11	
Demonstrate Supervisory Ability (3)									1,2,3 4,5,6 7,8,9	1,2,3, 4,5,6, 7,8,	1,2,3, 4,5,6, 7,8,9	1,2,3 4,5,6 7,8,9 10,11	
Comply With and Use Tech. Specs. (3)									1,2,3	3,4	1,3	4,6	
Notes: (1) Includes Technical Specification compliance for an RO. (2) Optional for an SRO-U. (3) Only applicable to SROs.													

Instructions:

Check the applicant's license type and enter one or more event numbers that will allow the examiners to evaluate every applicable competency for every applicant. (This includes all rating factors for each competency.) (Competency Rating factors as described on forms ES-303-1 and 303-3.)

Facility: Beaver Valley Unit 2Date of Exam: 12/7 Thru 12/18 2015Exam Level: RO ☒ SRO ☒

Item Description	Initial		
	a	b*	c#
1. Questions and answers technically accurate and applicable to facility	mk	JSK	JSK
2. a. NRC K/As referenced for all questions b. Facility learning objectives referenced as available	mk	JSK	JSK
3. SRO questions are appropriate per Section D.2.d of ES-401	mk	JSK	JSK
4. The sampling process was random and systematic (If more than 4 RO or 2 SRO questions are repeated from the last two NRC licensing exams, consult the NRR OL program office.)			JSK
5. Question duplication from the license screening/audit exam was controlled as indicated below (check the item that applies) and appears appropriate: ___ the audit exam was systematically and randomly developed; or ___ the audit exam was completed before the license exam was started; or ___ the examinations were developed independently; or <input checked="" type="checkbox"/> the licensee certifies that there is no duplication; or ___ other (explain)	mk	JSK	JSK
6. Bank use meets limits (no more than 75 percent from the bank, at least 10 percent new, and the rest new or modified); enter the actual RO / SRO-only question distribution(s) at right.	RO / SRO Bank	RO / SRO Modified	RO / SRO New
	27 / 5 (36.0% / 20.0%)	11 / 7 (14.7% / 28.0%)	37 / 13 (49.3% / 52.0%)
7. Between 50 and 60 percent of the questions on the RO exam are written at the comprehension/analysis level; the SRO exam may exceed 60 percent if the randomly selected K/As support the higher cognitive levels; enter the actual RO / SRO question distribution(s) at right.	RO / SRO Memory	RO / SRO C/A	
	34 / 9 (45.3% / 36.0%)	41 / 16 (54.7% / 64.0%)	
8. References/handouts provided do not give away answers or aid in the elimination of distractors.	mk	JSK	JSK
9. Question content conforms with specific K/A statements in the previously approved examination outline and is appropriate for the Tier to which they are assigned; deviations are justified	mk	JSK	JSK
10. Question psychometric quality and format meet the guidelines in ES Appendix B.	mk	JSK	JSK
11. The exam contains the required number of one-point, multiple choice items; the total is correct and agrees with value on cover sheet	mk	JSK	JSK

	Printed Name / Signature	Date
a. Author	<u>Mike Klingensmith</u> <i>Mike Klingensmith</i>	<u>12-2-15</u>
b. Facility Reviewer (*)	<u>Tom Gaydosik</u> <i>Tom Gaydosik</i>	<u>12-2-15</u>
c. NRC Chief Examiner (#)	<u>Peter Presby</u> <i>Peter Presby</i> * Discussed w/ program office.	<u>12-4-15</u>
d. NRC Supervisor	<u>Donald Jackson</u> <i>Donald Jackson</i>	<u>12-4-15</u>

Note: * The facility reviewer's initials/signature are not applicable for NRC-developed examinations.
Independent NRC reviewer initial items in Column "c"; chief examiner concurrence required.

Facility: BVPS-2		Date of Exam: 12/7 THRU 12/18 2015		Exam Level: RO <input checked="" type="checkbox"/> SRO <input checked="" type="checkbox"/>	
Item Description			Initials		
			a	b	c
1.	Clean answer sheets copied before grading		IOH	QWH	AS
2.	Answer key changes and question deletions justified and documented		IOH	QWH	AS
3.	Applicants' scores checked for addition errors (reviewers spot check > 25% of examinations)		IOH	QWH	AS
4.	Grading for all borderline cases (80 \pm 2% overall and 70 or 80, as applicable, \pm 4% on the SRO-only) reviewed in detail		IOH	QWH	AS
5.	All other failing examinations checked to ensure that grades are justified		IOH	QWH	AS
6.	Performance on missed questions checked for training deficiencies and wording problems; evaluate validity of questions missed by half or more of the applicants		IOH	QWH	AS

Printed Name/Signature		Date
a. Grader	<u>Thomas A GARDOSIK IOH</u>	<u>12/17/15</u>
b. Facility Reviewer(*)	<u>DAVE HELD (Dave Held)</u>	<u>12/17/15</u>
c. NRC Chief Examiner (*)	<u>Peter Presby / Peter Presby</u>	<u>1/20/16</u>
d. NRC Supervisor (*)	<u>Donald Jackson / Donald Jackson</u>	<u>1/20/16</u>

(*) The facility reviewer's signature is not applicable for examinations graded by the NRC; two independent NRC reviews are required.